

OUTLOOK

A WEEKLY NEWSPAPER FOR FACULTY AND STAFF AT THE UNIVERSITY OF MARYLAND AT COLLEGE PARK

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Computer Vision Lab Awarded \$2.3 Million Grant From Army

The Computer Vision Laboratory of the Center for Automation Research has been awarded a three-year \$2.3 million research contract by the U.S. Army Topographic Engineering Center.

The funds to the laboratory, which is in the College of Computer, Mathematical and Physical Sciences, were provided by the Defense Advanced Research Projects Agency under its Image Understanding Program.

The contract, in the amount of \$2,278,003, will support a research project entitled, "Vision-Based Navigation and Recognition." The project will investigate such topics as optimization-based methods of object extraction and identification from images; methods of performing basic visual tasks such as moving object detection and obstacle avoidance by analyzing image sequences obtained by a moving sensor; and efficient parallel algorithms for performing visual computations.

The Computer Vision Laboratory conducts research in robotics, using

computers to make machines "see" by interpreting three dimensional scenes. "Computer vision is one of the long-term grand-challenges in the national High-Performance Computing initiative," says Azriel Rosenfeld, director of the Center for Automation Research.

The Computer Vision Laboratory conducts research on time-varying image analysis, three-dimensional scene analysis, knowledge-based vision systems, architectures for vision, scale-space methods in vision, geometrical data structures for vision and graphics, and learning processes. Operating on an annual budget of more than \$1.5 million, the lab has more than 70 staffmembers including faculty and visiting faculty, post doctoral research associates, visiting researchers, graduate students and support personnel.

"Vision is the most powerful sense for many living organisms, including humans," says Yiannis Aloimonos, associate professor of computer science. "We take vision so much for

granted, because it is ordinarily so effortless, that we often fail to seriously consider how it works. A very large part of the human brain is devoted to visual perception. Many organisms possess visual capabilities, and their visual systems are not structured in the same way; moreover, they live in different environments and use vision for different purposes. But the principles underlying visual capabilities may be the same. It is these principles that are the subject of research in computer vision."

The researchers add that computer vision techniques have many practical applications such as document processing, industrial inspection, medical imaging, remote sensing, reconnaissance, and robot guidance.

The principal investigators for the "Vision-Based Navigation and Recognition" project are: Aloimonos; Rama Chellappa, professor of electrical engineering; Larry S. Davis, Computer Vision Laboratory director and director of the Institute for Advanced Computer Studies; and Rosenfeld.



Azriel Rosenfeld



Yiannis Aloimonos

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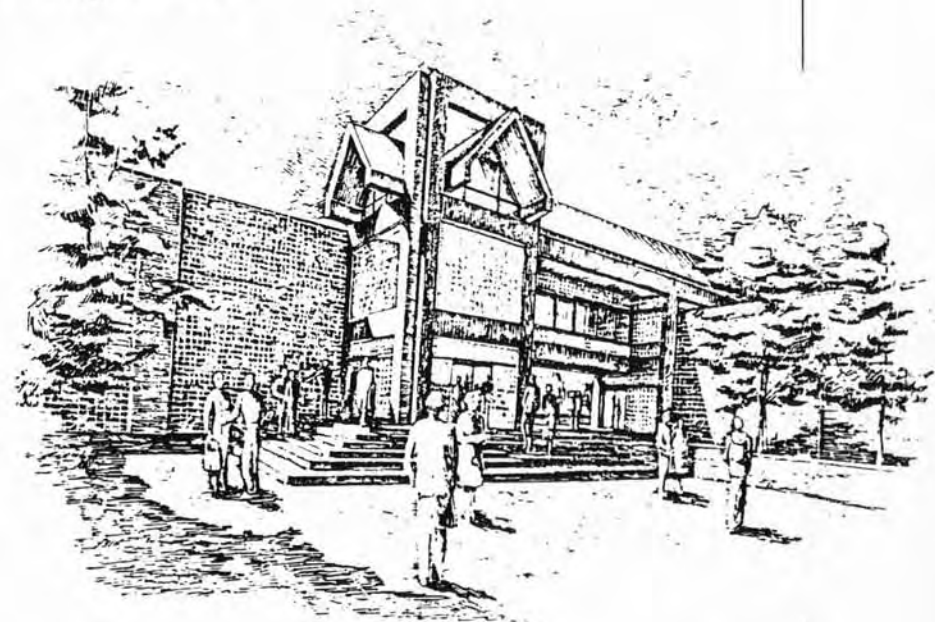
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College Park Celebrates "Agriculture Day" on April 25

Hundreds of students, faculty, friends and alumni of the University of Maryland Colleges of Agriculture and Life Sciences will highlight their annual "Agriculture Day" celebration on April 25 with the opening of a new Animal and Poultry Science Building. Maryland Secretary of Agriculture Robert Walker will be among the dignitaries on campus to help dedicate the new building.

"This new facility emphasizes the commitment College Park has made toward ensuring the future of the College of Agriculture and agricultural education in the state of Maryland," said Paul H. Mazzocchi, acting dean of the Colleges of Agriculture and Life Sciences. "This is only one step in a comprehensive program to build and renew our facilities to keep up with the industry's changing technologies, so that we can provide a first class education for our students and carry out innovative research."

An important component to the fulfillment of the university's land-grant mission to the state's agri-



cultural community, the new Animal and Poultry Science Building will provide faculty and students with vastly improved laboratory and classroom space. The building contains two new classrooms, an elevated lec-

Architects' rendering of new facility

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Construction of Modern American Citizenship Is Lecture Topic

Armstead L. Robinson, director of The Carter G. Woodson Institute for Afro-American and African Studies, University of Virginia, will speak Thursday, April 23 on "Reuniting the House Divided: Douglass, Lincoln and the Construction of Modern American Citizenship." The lecture will begin at 3:30 p.m. in Room 1120, South Campus Surge Building. A reception will follow. The lecture is made possible by a gift to the English Department from John and David Petrou in honor of Bebe Koch Petrou. For more information, call 53809.

Graduate School Announces 1992-93 Research Support Awards

The Office of Graduate Studies and Research has announced the 1992-93 Research Support Awards for the General Research Board Spring 1992 Competition. The following faculty members are the award winners:

College of Agriculture—Theophanes Solomos, professor of horticulture, "Cold-Induced Responses in Potato Tubers;"

School of Architecture—Thomas L. Schumacher, professor of architecture, "The Palladio Variations: A Study in Facade Composition;"

College of Arts and Humanities—Catherine A. Schuler, assistant professor of theatre, "Women in Russian Theatre: The Silver Age;"

College of Computer, Mathematical and Physical Sciences—Eirik J. Krogstad, assistant professor of geol-

ogy, "Pb Isotopic Studies of Crustal Evolution in North America;"

College of Education—Janice M. Birk, professor of counseling and personnel services, "An Exploration of Key Issues and Concerns of Rural Mental Health Service Providers;"

College of Engineering—Oliver J. Hao, associate professor of civil engineering, "Application of Laser Energy for the Destruction of Chemicals;"

Robert M. Briber, assistant professor of materials and nuclear engineering, "Control of Polymer Blend Morphology by Cross-linking;"

Guangming Zhang, associate professor of mechanical engineering, "An Experimental Investigation for In-Process Surface Roughness Inspection Using Image Processing;"

College of Human Ecology—Behnam Pourdeyhimi,

associate professor of textiles and consumer economics, "Evaluating Acrylic Bone Cements Reinforced with High Performance Fibers;"

College of Life Sciences—Bryan W. Eichhorn, assistant professor of chemistry and biochemistry, "Synthesis and Characterization of New Transition-Metal Main-Group Polymeric Clusters;"

James W. Herndon, associate professor of chemistry and biochemistry, "Metal Carbenes and Cyclobutenediones: A New Five-Membered Ring-Forming Reaction;"

Spencer Benson, "Characterization of the E. coli imp gene: A gene involved in membrane permeability;"

Gerald S. Wilkinson, assistant professor of zoology, "Vocal Communication and Cooperation in Greater Spear-Nosed Bats."

System Office Offers Electronic Bulletin Board

Actions of the Board of Regents and activities within the University of Maryland System administration are now available as they happen on UMS UPDATE.

Centered at the UMS Office of Public Relations, UMS UPDATE is an electronic bulletin board, not a newsletter. UMS happenings are posted on an ongoing basis in chronological order, beginning with the most recent.

A table of contents guides readers to specific topics and identifies new postings. The items are brief and to the point and direct readers to the appropriate document, person or office for more information.

UMS UPDATE can be found within the INFO function. For those offices that have INTERNET just type telnet info.umd.edu. For those who do not have INTERNET but have access to a modem, call 301-403-4333 and at the prompt type telnet info. Once in INFO, all readers should choose Uof-Maryland and then go into umsa update.

"There are bound to be some bugs along the way," says Nancy Daniel. "I hope you will bear with us as we work out all the details. In the meantime, don't hesitate to send us your comments and suggestions on how to make UMS UPDATE more effective."

"Agriculture Day" Set

continued from page 1

ture hall, a reading room, two computer classrooms for graduate students and a large computer classroom for undergraduate students. The new facility also provides state-of-the-art laboratories for faculty and students, and a 50,000-square-foot animal support facility and veterinary clinic. The new building is located on the north side of the campus, adjacent to the university barns.

The opening of the new building compliments College Park's spring-time student celebration known as "Agriculture Day," or "Ag Day."

The day's activities provide students with an opportunity to demonstrate their skills and techniques learned during the semester. Also included will be food and creative student and faculty exhibits. A cavalry demonstration by students will start the morning's activities, followed by students exhibiting cattle, sheep and swine throughout the day. Prizes will be awarded in all categories.

For more information on "Ag Day" activities, contact the College of Agriculture at (301) 405-2071.

Correction

Thomas Schelling, distinguished professor of economics, was a finalist for the first Outstanding Faculty Award presented by the College Park Association of Parents. Schelling's name was omitted from an April 6 story on the award.

OUTLOOK

Outlook is the weekly faculty-staff newspaper serving the College Park campus community.

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UNIVERSITY OF MARYLAND AT COLLEGE PARK

Forum on Faculty Grievance Procedures Set

A forum on the campus' new faculty grievance procedures will be held from 3:30 to 5:30 p.m. Wednesday, April 22 in Room 1400 Marie Mount. Co-sponsored by the campus chapter of the American Association of University Professors and the Faculty Guild, the forum will feature Ann H. Franke, council, AAUP, and Joel Cohen, UMCP ombuds officer.

NEWS

Computerized Classroom Changes the Way Students and Teachers Interact

The AT&T teaching theater is a classroom in which the traditional teaching tools, such as a blackboard and chalk, are replaced with hi-tech equipment.

Students sit by computer monitors which they use as class notebooks. During class, students can electronically transfer information from the overhead projector to a computer file containing their class notes. Students are also able to send their homework assignments electronically to their professors.

Located in room 3140 of the Engineering Classroom Building, the theater contains 20 computer monitors plus a host of audio-visual equipment including a laser disc player, video cameras, and a video tape player.

Despite all the equipment, Project Manager Walter Gilbert stresses that the room is not a computer lab or an audio/video room. Rather, he says the purpose of the room is "to use technology to transform lectures and learning."

An \$876,000 grant from AT&T covers the room's technical equipment and support staff salaries. The university added \$430,000 to cover the cost of redesigning the room, lighting, and custom designed desks.

"It's a real joy to teach in," says

Rick Miranda, who teaches a behavioral sciences class in the teaching theater. "This is obviously the classroom of the future."

In addition to Miranda's course, seven others are being taught in the teaching theater this semester.

In one psychology statistics class, the teacher makes use of the room by putting the course's syllabus and notes in a computer file. During class, students can retrieve this file and follow along with the notes as the teacher lectures. Since students do not need to be preoccupied with scribbling down notes, they can concentrate on the concepts being taught.

"It makes the class less boring. You're able to do things on your own," says Lisa Goines, a sophomore marine biology major.

But even the classroom of the future is not free of problems. Occasionally, computer glitches slow down a class. And when a student does not know how to use the computer for a certain application, the class must stop to allow the student to catch up.

In addition to using the teaching theater for classes, the room is rented out for business meetings to organizations such as the U.S. Department of Agriculture and the Environmental Protection Agency. The cost for an afternoon is \$900, which Gilbert calls

"dirt cheap" for the quality of the room.

The room is an experimental prototype of the classroom of the future. Just as the invention of mass produced books revolutionized the world, computers will revolutionize the classroom, Gilbert said.

For example, computers can be used to allow students to respond anonymously to questions. Instead of limiting class participation to the traditional hand-raisers, all students may be required to enter a response. Research shows that women and minorities participate less frequently in classroom discussion, and computers may make participation easier for them.

Plans are underway to build three other rooms similar to the teaching theater, two in the new plant sciences building and one in the new business building.

In addition, many private companies are visiting the teaching theater and are considering building conference rooms modeled from it.

While similar rooms exist at the Bethesda Marriot, Brown University, and the University of Arizona, Gilbert is adamant that the university's is the best.

—Beth Panitz

New Program Introduces Undergraduates to Research

For many undergraduates, the word research conjures up a 15-page term paper and toiling with footnotes. But a new program here may broaden that perception and turn some students on to the heart of scholarly pursuits.

The Undergraduate Research Assistance Program (URAP) is a new initiative from Undergraduate Studies that will give interested undergraduates the chance to volunteer as research assistants to College Park faculty.

Modeled after similar programs at MIT and UCLA, the new program will allow students in good academic standing to collaborate with a faculty member's on-going research in a meaningful way.

In exchange, the students will take a workshop from Undergraduate Studies to prepare a "research resume" and will agree to volunteer as research assistants 4 to 6 hours a week for at least one semester.

To establish the link with a faculty member, students will study on-going scholarly and creative activities described in a "Faculty Research Directory" to be published by Under-

graduate Studies this spring. When they find a research project they are interested in, students will contact the faculty member to discuss the project. Faculty will have complete discretion in selecting or rejecting student volunteers.

In a letter to faculty announcing the program, Dean for Undergraduate Studies Kathryn Mohrman cautions that research projects should have some meaningful intellectual content for the student.

"Merely xeroxing or running errands will not be acceptable," she says. "But the very process of being involved with a faculty member on a serious project will be a major part of the experience for the undergraduate."

According to Mohrman, the program differs from independent study in several ways. The research project is the faculty member's, not the student's; there is no expectation of a paper or a project to be graded; and no academic credit will be awarded, although students will receive a notation on their transcripts.

Many faculty members who have used undergraduates as research

assistants are supportive of this relationship.

"Doing research with undergraduates could be more exciting than research with graduate students," says David Holloway, professor of mechanical engineering. "When I work with graduate students I direct their research; when I work with undergraduates they direct and lead me."

Sally Koblinsky, professor in the Department of Family and Community Development says the inexperience of undergraduate students actually is a strength.

"Less bound than my colleagues by knowledge of existing research, they brought new observations and fresh insights to my study of homeless children's health and behavior."

To receive information about the Undergraduate Research Assistant Program, including an application for the Faculty Research Directory, call Bonnie Oh, assistant dean for Undergraduate Studies and director of the program, at 405-9355.

—John Fritz

University's Maryland Resource Center for Assessment Hosts First Conference



Robert W. Lissitz and Margaret Miller

Nearly 100 administrative officers, including several presidents of Maryland public institutions of higher education, recently attended the Maryland Resource Center for Assessment's first conference "Higher Education Assessment: Meeting the Challenge."

According to Robert W. Lissitz, director of the center, which is housed in the Department of Measurement, Statistics, and Evaluation in the College of Education, the purpose of the conference was to bring together the leaders of Maryland public institutions of higher education, answer their questions and provide information on assessment issues, including advice about implementation.

"These are the people who are responsible for making sure their campus conducts assessment studies. We want to support them in that endeavor," Lissitz says.

The center, which was formed to support the assessment efforts of all two-and-four year public institutions in the state, is funded by a grant from the Maryland Higher Education Commission and provides technical support and matching funds to institutions. In all, 19 proposals from 12 institutions, including the university, were awarded a total of \$59,907.

The conference combined lectures on assessment issues and accountability along with an opportunity for questions and discussions and provided information about the ways the center can benefit assessment efforts at these institutions.

"I think that assessment done well can be a very effective agent for change in the quality of institutions," said UMCP President William E. Kirwan, who introduced the keynote speaker Margaret Miller, associate director of the State Council of Higher Education for Virginia.

Miller's topic was "Owning Assessment."

"Assessment really has been a force for good in Virginia, and it can be one in Maryland," said Miller, who encouraged institutions to become actively involved in assessment studies and emphasized the importance of setting goals and asking questions which the faculty genuinely want answered.

According to Miller, the competition for public resources requires higher education institutions to

become involved in processes that will help justify their existence.

"A campus committed to assessment should be prepared to push a boulder uphill for the next 10 years," she said, adding that with regard to institutional fear of negative evaluation, "there is no such thing as bad news, except having no news."

"It's only by linking assessment results to planning and resource distribution that it will be seen to matter," she said.

One of the weaknesses of Virginia's approach to assessment, which places very strong emphasis on improvement rather than accountability, is that the information produced is still being used far too little in decision-making at the dean's level and above, she said, "... and for that reason, on many campuses, is still considered marginal activity."

She also focused on the related issue of stressing the importance of quality over quantity.

"Programs should be encouraged to identify weaknesses and then be given resources necessary to improve," she said. "It helps us identify what strengths we should build on."

"The benefits to be gained from assessment, though, are diminished to the degree that it's treated as an external mandate with which one merely complies," she added.

Unless the campus takes ownership of assessment, Miller said, it will be an expenditure of time and energy and money that will yield very little return except faculty and administrative resentment.

"But assessment can provide the evidence on which real curricular improvement and good management decisions can be based," she said.

Ted Marchese, vice president of the American Association for Higher Education, discussed national trends in assessment, reporting that 40 states currently require assessment activi-

ties of their higher education institutions.

He also cited the increased commitment for useful assessment on many campuses, although the majority of institutions in the U.S. are "stone walling" this effort.

"While we like to talk about quality we seldom cite evidence for such a claim," he said.

He stressed the need for collective faculty responsibility in the assessment process and a commitment to a "process aimed at actionable information and continuous improvement."

"The key element of a successful campus is a strong commitment to improvement," he said, adding that "you want to know how you're doing and what's the next thing you can do to improve, which means you want assessment."

"Show me a place where assessment is in a separate office run by administrators in order to meet some external parties' mandate, and I will show you an activity that is going nowhere," he said.

Donald Farmer, vice president for academic affairs at Kings College in Pennsylvania, told the conference that his view of assessment was that of the faculty perspective on how to improve student learning in higher education.

Citing the 1984 publication *Involvement in Learning* by the Study Group on Conditions of Excellence in American Higher Education, he said, "this group challenged faculty to consider three critical conditions of excellence identified in the report: one, involving students more directly in their own learning; two, establishing high expectations for student learning outcomes; and three, using assessment information to redirect student effort in order to enhance student learning and to lead to improvements in teaching practices."

Farmer also said that instruction and assessment "should never be divorced."

"Assessment should simply be seen as a strategy which is an integral part of teaching and learning," he said.

—Lisa Gregory

Josephine Withers Gives Lecture

The Women's Studies Program 1992 Polyseminar series, "Women in Cultures of Resistance in the United States," continues April 27 when Josephine Withers, associate professor of art history, presents "Walking in a White World: The Work of Adrian Piper." The lecture, which is free and open to the public, begins at 8 p.m. in Room 2203 of the Art/Sociology Building. For more information, call 56877.

ARTS

Censorship and Creativity to be Explored

The effects of war, censorship, and propaganda on the creative process during a turbulent period of shifting political relationships will be explored April 25-26 when UMCP's Inter-College Committee on East Asian Studies presents a conference on "War, Reconstruction, and Creativity in East Asia, 1920-1960."

Co-sponsored by the Department of Hebrew and East Asian Languages and Literatures and the Washington and Southeast Regional Seminar on Japan, and funded in part by UMCP's Office of International Affairs, the conference will feature historians and literature and art history experts from England, Korea, Japan and Taiwan. Included among the 19 participating scholars will be UMCP professors Eleanor Kerkham, Jason Kuo, Marlene Mayo, Bonnie Oh, Mark Sandler and Angelina Yee.

The conference will be held in Room 2309 of the Art/Sociology Building. After opening remarks by President William E. Kirwan at 9:00 a.m., four experts on Korea will present papers on "Korean Poetry of the Early Colonial Period," "Artistic Trends in Korean Painting in the 1930s," and "A Korean Voice in Japan: The Writings of Chang Hyok-chu." UMCP's Oh will present "Women and Creativity in Early

Colonial Korea."

According to Marlene Mayo, Japanese history professor and co-organizer of the conference, very little is known in Western scholarship about art in Korea and Taiwan during Japanese colonial rule. Such extensive treatment of the creative process in wartime and occupied Japan is also unusual, she adds.

"Much of the information to be presented in these papers has not been heard before," she says. "It is new, cutting-edge scholarship."

A "Japan Panel" follows at 1:00 p.m. Eight papers will be presented, including three by UMCP professors: "The Wartime Paintings of Fujita Tsuguji" (Sandler); "To Be or Not To Be: Samurai Literature and Drama in Occupied Japan" (Mayo); and "Women and War: Tamura Taijiro's 1947 *Biography of a Prostitute*" (Kerkham).

In Mayo's presentation, she uses as an analogy the censorship of Shakespeare from American or British theaters as she explores the effects of the United States' very real censorship of Japanese Kabuki theater.

The seven members of the "China Panel," including Yee and Kuo, will deliver their papers beginning at 9:00 a.m. on Sunday, April 26. Yee will present "Asia's Orphan: Yang K'uei

and the Literature of Resistance in Colonial Taiwan," and Kuo will present "Painting and Cultural Politics in Postwar Taiwan."

The conference also will include, on Saturday evening, a public showing of the Japanese feature film *The Most Beautiful*, about women workers in wartime Japan. It is a little-known but significant film directed in 1944 by the famous filmmaker Akira Kurosawa.

Mayo co-organized the conference with Thomas Rimer, Japanese literature specialist at the University of Pittsburgh.

The Inter-College Committee on East Asian Studies, working with the College of Arts and Humanities and the College of Behavioral and Social Sciences, strives to promote interdisciplinary study of China, Japan and Korea through the expansion of course offerings and sponsorship of conferences and lecture and film series. The committee also administers the 24-credit Undergraduate Certificate Program on East Asian Studies.

For more information on "War, Reconstruction, and Creativity in East Asia, 1920-1960," call 54243 or 54239.

—Beth Workman



Marlene Mayo

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University Composer Premieres Work

Jeffrey Mumford, award-winning composer and contemporary music specialist for the Concert Society at



Jeffrey Mumford

Maryland, will have his most recent work, *from the middle...becoming air*, premiered Sunday, April 26 by the Boston Chamber Music Society. The performance will take place at 3:00 p.m. in the Center of Adult Education Auditorium.

from the middle...becoming air, a string trio, was commissioned by the Fromm Music Foundation and is dedicated to violist Marcus Thompson, for whom it was written. Thompson will be one of three musicians performing the work on April 26.

According to Mumford, "The work features the viola as a continuously evolving voice amid the commentaries of the other instruments. As the piece unfolds, the capricious character of the viola becomes increasingly

diffuse and eventually assumes a more tranquil persona along with the violin and cello."

The concept of cloud imagery is used in this piece as well as his other works. Mumford sees cloud forms as analogous to suspended musical structures that have several layers which move simultaneously, sometimes together, sometimes apart.

This cloud imagery has its roots in painting, a career that Mumford hoped to pursue when he entered the University of California, Irvine, as an art major. As a consequence of philosophical differences with the art department, however, Mumford sought support for his creative ideas in the music department.

Not that music was foreign to Mumford. By the time he entered college, he had already composed some music and played clarinet, some guitar and was a self-taught pianist.

Mumford is the recipient of numerous fellowships, grants, awards and commissions. His music has been performed in the U.S. and abroad, is recorded on the Composers' Recordings, Inc. label, and is published by Quadrivium Music Press and in journals including *Perspectives of New Music*.

A member of the board of directors of the U.S. Chapter of the League of Composers/International Society for Contemporary Music, Mumford is currently at work on a viola concerto requested by Marcus Thompson and commissioned by the Roanoke Symphony, and a piece for solo viola commissioned by the Walter W. Naumburg Foundation for its viola competition winner Misha Amory.

The concert will be preceded by a 1:30 p.m. seminar titled "Cultural Diversity in the Creative Community." The free seminar, which is funded by Public Humanities Projects of the National Endowment for the Humanities, will include discussion of minority creative work within a European musical tradition, the effect that a culturally diverse creative community has on the growth of concert music, and how outreach to minority communities can be achieved.

Tickets for the concert are \$17 general admission, \$14.50 seniors, and \$5 students. For more information, call 403-4240.

—Beth Workman

College Park International Directory Available

The Office of International Affairs has produced a directory of the university's international centers, institutes and programs, including those programs that are administratively part of the University of Maryland System with offices on the College Park campus. The directory also includes several charts to inform directory users of the administrative location of the various programs, centers and institutes. The directory will be updated on a yearly basis. For more information or if you would like to acquire a copy of the directory, call 405-4772.

Study Looks at Interaction in Married Couples



Norman Epstein

What makes a marriage work?

That is the question of sorts that Norman Epstein, an associate professor in the Department of Family and Community Development in the College of Human Ecology, is currently attempting to tackle.

Epstein, who recently co authored a book on Cognitive-Behavioral Marital Therapy, is in the midst of reviewing a survey of married couples in Maryland. The same survey was also done by colleagues in North Carolina in an effort to compare regional differences. A set of questionnaires was sent to approximately 360 couples in both Maryland and North Carolina.

"We're trying to understand some of the aspects of interaction between partners and how they handle conflict," says Epstein. "We're looking at couples with differing levels of distress, how they communicate, and how they perceive each other's actions."

According to Epstein, everyone has certain standards for good relationships.

"We're trying to measure those standards and understand how they impact relationships," he says.

"Problems can arise when two partners have different standards, such as the issue of boundaries," says Epstein. "This involves how much individual time or privacy a person wants versus sharing and together-

ness. One person in the relationship may feel that they should spend all their time together and share all the same interests. The other may feel that he or she needs time alone and is being smothered by the other person."

One person may also feel that what happens between a couple should be kept private, while the other person may feel free to discuss with family and friends, says Epstein.

Couples often don't discuss differences before getting married and often it is the differences that attract couples to each other in the first place, he says.

"Couples can become attracted to one another because they're different," he says. "But they later find out that what first attracted them is now getting on their nerves. I will ask a couple what attracted you to each other and usually they say I liked the difference in the beginning. Now I don't. Incompatible standards can be a major source of conflict."

Epstein looked at the question of whether or not there was greater distress when couples in his study had greater discrepancies in their relationship standards.

"The thing that was interesting and a little bit surprising for us was that at least within this sample that was not a strong predictor of distress," he says.

Then there are the extreme or unrealistic standards, such as mind reading.

"Some partners think that if they are really close and care about each other, they can read each other's mind," says Epstein. "One may come home after a bad day and assume their partner knows this."

According to Epstein, there is some evidence that people who have extreme standards are more distressed and have a harder time mending conflicts.

"We didn't find that to be the case," says Epstein referring to his survey of Maryland couples. "There was a very mild relationship between having extreme standards and being distressed."

What did tend to be a big predictor of distress was whether or not an individual was satisfied with the way his or her standards were being met within the relationship.

"The results suggest that it's not whether you agree or disagree on a standard," says Epstein. "but how you somehow resolve that by allowing the two of you to have different ideas and to find a way to live together and feel like your standards are being met adequately."

"Some couples seem to be very good at doing that and some couples don't."

—Lisa Gregory

College Park Physical Scientists Collaborate With Japan

Several College Park physicists are involved in research projects with scientists in Japan.

Professor J. Robert Anderson has been collaborating since 1989 with scientists at Tohoku University's Institute for Material Research in Sendai, Japan to study high-field properties of diluted magnetic semiconductors and the physics and chemistry of microcluster arrays. The researchers are using a high steady-magnetic-field facility, one of only three in the world.

Professor Sadao Oneda is collaborating with researchers from Chubu, Kyoto, Shizuoka and Tokyo Universities and with colleagues from Canada to develop a new approach to particle physics through asymptotic symmetry and constraint algebra. Oneda also has co-authored a book on asymptotic symmetry with a physicist at the University of Shizuoka.

The High Energy Physics Group, directed by George A. Snow and Andris Skuja, collaborates with physicists from Japan on two international projects. One, the Omni-Purpose Apparatus for the Large

Electron-Positron colliding machine (OPAL) experiment, is a three-continent, nine-country collaboration to study the properties of a weak interaction vector boson produced in the high-energy electron-positron collision. It is based at the Centre Europeen de Recherches Nucleaires (CERN) in Geneva, Switzerland. Japanese researchers include a group from the University of Tokyo and Kobe University.

The high-energy group also is working on the Solenoidal Detector-Collaboration, an international effort to design and build a detector for the Superconducting Super Collider (SSC) accelerator being built at Waxahatchie, Texas. The SSC detector will be used to study proton-proton collisions at the highest energy levels ever observed. Several groups in Japan are involved in this project, including a large group from KEK Laboratories as well as universities throughout Japan.

Professor Jan Sengers of the Institute for Physical Science and Technology (IPST), is collaborating with a research group from Gunma Univer-

sity in Karyu, Japan on a critical rheology project to study the effect of shear on phase transitions in liquid mixtures. The principal investigator is K. Hamano, a professor in Gunma's Department of Biological and Chemical Engineering. Hamano came to College Park in 1988-89 as a post-doctoral researcher at IPST. College Park doctoral candidate A.H. Krall also is collaborating on this project. The research is conducted in the U.S. and Japan and the group is co-authoring several papers.

Professor Kenichi Kanatani of Gunma University, Japan, recently was a visiting professor at the Computer Vision Laboratory in the Center for Automation Research (CfAR). Kanatani is a noted authority on computer vision and is the author of the monograph Group Theoretic Methods in Image Understanding. He worked with College Park Professor Azriel Rosenfeld, director of CfAR. Researchers at the Center study vision robotics and human-computer interaction.

For Inner and Outer Peace Available Through Maryland Chorus

For Inner and Outer Peace, a book by Antal Dorati, former music director of the National Symphony, is available through the Maryland Chorus for \$20. Dorati holds an honorary doctor of humane letters from the university, and had a 20 year relationship performing with the Maryland Chorus here and abroad before his death in 1988. The book outlines Dorati's plan for peace in the world and among people. For more info., call 55571.

F.Y.I.

Colleges of Agriculture and Life Sciences Celebrate Faculty and Staff Excellence

Eight faculty and staff members from the Colleges of Agriculture and Life Sciences were acknowledged by their peers during the 1992 Faculty and Staff Excellence Awards held on April 16.

Jerry DeBarthe, animal sciences, received the first Dean Gordon M. Cairns Award for Distinguished and Creative Work and Teaching in Agriculture. Dr. Cairns served as Dean of the College of Agriculture for 28 years.

Awards for excellence in their field also went to the following:

Margaret Kempf, animal sciences, for classified staff, College of Agriculture;

Linda Dalo, zoology, for classified staff, College of Life Sciences;

Galen P. Dively, entomology, for extension work;

John Watson, botany, as junior faculty;



Millard Alexander, chemistry/biochemistry, for research;

Gerald Miller, chemistry/biochemistry, for service;

Paul Bottino, botany, for teaching and advising.

Samuel Kotz on *Breakthroughs in Statistics*

As if a 10-volume encyclopedia on statistics wasn't enough, Samuel Kotz has added two more books to his credit. Kotz, professor of statistics in the College of Business and Management, recently co-authored a two-volume work entitled *Breakthroughs in Statistics*.

In the 1980s, Kotz helped edit the 10-volume *Encyclopedia of Statistical Sciences*. But, noting two recent changes in the field, he felt the need to write even more about statistics.

First, he says, statistics is beginning to assume the status of a legitimate academic science, rather than being thought of as a stepchild of mathematics. "Statistics can survive and even flourish as an academic science without necessarily being under the umbrella of mathematics," he says.

In addition, he believes, the proliferation of statistical computer programs, while certainly making it easier to handle data, is diverting attention away from basic research in

statistics. "The trend toward the use of computer programs provides a wrong impression about the nature of statistics as a science."

Kotz has taught at College Park since 1979 and is an honorary professor and academic adviser at the Harbin Institute of Technology in China, which he attended from 1947 through 1949.

General Motors Honors Three UMCP Students for Volunteer Spirit

Each year, General Motors sponsors the Volunteer Spirit Award at some two dozen universities across the country to celebrate and acknowledge outstanding examples of student volunteerism in the community.

Three College Park students, Dzung Le, Gary S. Tosadori, and Laura H. Warnock, were honored for their volunteer activities during a reception on April 14 at the Rossborough Inn.

GM executives and Vice President for Student Affairs William Thomas presented plaques and five shares of GM stock to each student.

Dzung Le, a graduate student in reliability engineering, has been an English language tutor for the Lutheran Social Services of the

National Capital Area since 1989.

He worked on the organization's Project Homecoming, which was designed to help black American - Asians, many of whom are from Vietnam, understand their culture better. For Black History Month, he organized a tour of the National Museum of African Art, describing the exhibits in Vietnamese. He also has organized Thanksgiving dinners and Christmas parties, as well as traditional Vietnamese events such as New Years and the Moon Festival.

Laura Warnock, a sophomore Spanish and pre nursing major has worked as a medical assistant and nursing assistant for the Spanish Catholic Medical Clinic in Silver

Spring and was a hospital nursing floor volunteer for Doctor's Community Hospital in Lanham.

She also is involved with the English Speaking Partners Program for the Maryland English Institute on campus.

Gary S. Tosadori, a senior Government and Politics major, worked at the Carroll House Shelter in Silver Spring. This year, he was Co-chairperson of the Catholic Student Center's Hunger-Homeless Committee, which visits Carroll House and the Family Crisis Center in Prince George's County.

CALENDAR

Final Outlook May 4

May 4 will be the last *Outlook* of the semester, and the last calendar. So that we can print a special summer calendar at that time, we need to know about any lectures, performances, exhibits, or other special events going on at the University of Maryland during the summer months. Please send submissions by April 23, in writing, to Laurie Gaines, Calendar Editor, 2101 Turner Lab. Please include titles of events, participants' names, time, place, and phone number for information. For more information, call 405-7339.

APRIL 20 - 28, 1992

20 MONDAY

Art Gallery Exhibition: "Maryland State Artist Series," Mar. 25-Apr. 24: The Art Gallery. Call 405-2763 for info.

President's Commission on Women's Affairs Steering Committee Meeting, noon, Rossborough Inn. Call 5-5806 for info.

Center for International Development and Conflict Management (CIDCM) Colloquium: "The Legacy of President Anwar Sadat: A Model for Current Peace Initiatives in the Middle East," Jehan Sadat, widow of Anwar Sadat and CIDCM fellow, 2:30 p.m., Multipurpose Room, St. Mary's Language House. Call 4-7703 for info.

Entomology Colloquium: "Genetic Differences Among Isolated Populations of *Anopheles pseudopunctipennis*, a Primary Vector of the American Continent," Jose Estrada, Entomology, 4 p.m., 0200 Symons. Call 5-3912 for info.

Computer Science at College Park Colloquium: "Software Safety Analysis," Nancy Levenson, UC Irvine, 4 p.m., CLB 0111. Reception, 3:30, 1152 AVW. Call 5-2661 for info.

Horticulture Colloquium: "Physical and Biochemical Studies of Dormancy in Apple Buds," Dehua Liu, Horticulture, 4 p.m., 0128B Holzapfel. Call 5-4336 for info.

Space Science Seminar: "Magnetohydrodynamic Turbulence and Its Relationship to Interplanetary Magnetic Fluctuations," M. Goldstein, NASA, 4:30 p.m., 1113 Computer/Space Science. Call 5-6226 for info.

21 TUESDAY

Ecology Seminar: "Host Parasite Interactions in Mollusc-Trematode Associations," Greg Ruiz, Smithsonian Environmental Research Center, noon, 1208 Zoo/Psych. Call 5-6944 for info.

Graduate School Distinguished Lecturer: "Retroviruses: Viruses of Cancer and AIDS: The Second Decade," Robert C. Gallo, National Cancer Institute, 3:30 p.m., wine and cheese reception to follow, 1240 Zoo/Psych. Call 5-1487 for info.

22 WEDNESDAY

Committee on Africa and Africa in the Americas Brown Bag Seminar: "Education and Development in Africa," Richard Orraca Tetteh, Anthropology, noon, 2119 F.S. Key. Call 5-2118 for info.

Counseling Center Research and Development Meeting: "Doing Cross Cultural Counseling: What Knowledge is of Most Worth," Barbara Finklestein, Education Policy, Planning, and Administration, noon-1 p.m., 0106 Shoemaker. Call 4-7691 for info.

Molecular and Cell Biology Seminar: "Analysis of Protein Translocation Through Biochemical Reconstitution," Christopher V. Nicchitta, Rockefeller University, 12:05 p.m., 1208 Zoo/Psych. Call 5-6991 for info.

Forum on the Campus' New Faculty Grievance Procedures, co-sponsored by the Campus Chapter of the American Association of University Professors and the Faculty Guild, 3:30-5:30 p.m., 1400 Marie Mount Hall. Call 5-1227 for info.

Robotics Seminar: "Algebraic Image Operators: An Approach to Model-based Vision," Bao Lerner, KT-Tech, 4-5 p.m., Rotorcraft Conference Room, Building 093. Call 5-7353 for info.

23 THURSDAY

Technology Forum: "The Road to Global Connectivity: Hybrid Communication Networks," Tony Ephremides, Center for the Commercial Development of Space, sponsored by UMCP and the Suburban Maryland Technology Council, 7:30-9:30 a.m., Grand Ballroom Lounge, Stamp Student Union. \$12 fee. Call (301)762-6325 for info and registration.*

UM Institute for Advanced Computer Studies (UMIACS) Seminar on Algorithms: "General Purpose Parallel Computing," Bill McCall, NEC, 2 p.m., 1112 AVW. Call 5-6761 for info.

Meteorology Seminar: "Influence of SST Anomalies on the Regional Climate of North America," Chung-Kyu Park, NASA, 3:30 p.m., 2114 Computer/Space Sciences; refreshments, 3 p.m. Call 5-5392 for info.

Campus Senate PCC Committee Special Meeting, 3:30-6:30 p.m., 0126 Reckord Armory. Call 5-5805 for info.

"Writers Here and Now" Reading: Jack Salamanca, 3:30 p.m., Maryland Room, Marie Mount Hall. Call 5-3819 for info.

1992 Mary Shorb Lecture in the Nutritional Sciences: "Vitamin A Physiology: New Perspectives on Absorption, Transport and Functions," Kaare R. Norum, University of Oslo, 3:30-5 p.m., 0408 Animal Sciences. Call 5-4521 for info.

African Studies Lecture: "Reuniting the House Divided: Douglass, Lincoln and the Construction of Modern American Citizenship," Armstead Robinson, U. VA., 3:30 p.m., 1120 Surge. Reception to follow. Call 5-3809 for info.

History and Philosophy of Science Colloquium: "Zippers," Robert Fridel, CHPS/History, 4 p.m., 1116 IPT. Call 5-5691 for info.

Women of Influence Banquet and Awards Ceremony, sponsored by the Undergraduate Women's Leadership Committee, 5-7 p.m., Colony Ballroom, Stamp Student Union. Call 4-8505 for info.

Engineering Research Center Reliability Seminar: "NRC Reliability and Maintenance Activities for Current and Future Nuclear Reactors," Richard Correia, Nuclear Regulatory Commission, 5:15-6:15 p.m., 2110 Chemical/Nuclear Engineering. Call 5-3887 for info.

Dingman Center for Entrepreneurship Seminar: "The Anatomy of a Venture Capital Deal," 6-9 p.m., Sheraton Inner Harbor, Baltimore. \$15 registration fee includes buffet. Call 5-2151 for info and registration.*

University Theatre: Noises Off, Apr. 23-25 and Apr. 30-May 2 at 8 p.m.; Apr. 26 at 2 p.m., Tawes Theatre, \$8 standard admission, \$6 students and seniors. Call 5-2201 for info.*

24 FRIDAY

Conference and Cultural Festival: "The New Germany: A Search For Identity," panel discussions, films, workshops and entertainment, 8:30 a.m.-10 p.m. Concert and festival events are free, \$5 for lunch, \$11 for dinner. Call 5-4091 for info.*

Geology Seminar: "Comprehensive Model for the Formation of the Tintic Ore Deposits, Western Utah," Holly Stein, U.S. Geological Survey, Denver, 11 a.m., 0105 Hornbake. Call 5-4089 for info.

Botany Seminar: "Life in the Shadows: Photosynthesis and Growth in the Rainforest Understory," Robin Chazdon, University of Connecticut, noon, 2242 Patterson. Refreshments, 11:30 a.m., 1216 Patterson. Call 5-1588 for info.

Spring Craft Bazaar, 11:30 a.m.-1:30 p.m., Rossborough Inn. \$5 Salad and Sandwich Buffet. Call 4-8012 for info.

Agricultural and Resource Economics Seminar: "Do Farm Programs Increase Farmers' Income?" Bruce Gardener, Agricultural and Resource Economics, noon-2 p.m., 2200 Symons. Call 5-1293 for info.

Speech Communication Colloquium: "Visual and Verbal Interactions in the Architecture and Writing of Le Corbusier," David Birdsell, Speech, Baruch College of the City University of New York, noon, 0147 Tawes. Call 5-6524 for info.

Published Women's Luncheon, Kathy McAdams, Journalism, noon-1 p.m., Carriage House, Rossborough Inn. \$9 standard admission. Call 4-8013 for reservations and info.*

First National Bank of Maryland Finance Research Colloquium: "Profitability of Contrarian Strategies: International Evidence," Yasushi Hamao, Columbia University, 1-2:30 p.m., 2102 Tydings. Call 5-2256 for info.

Mental Health Lunch 'n' Learn Seminar: "Near Death Experience as a Transformational Crisis," Pythia Peay, journalist, 1-2 p.m., 3100E Health Center. Call 4-8106 for info.

Fluid Dynamics Review Seminar: "Numerical Simulation of Transitional Shear Flows With Monotonic Flux-Corrected Transport Models," Fernando Grimstein, Naval Research Lab, 2 p.m., 2164 Engineering. Call 5-5272 for info.

Graduate Student Coffeehouse, with-cash bar, hors d'oeuvres, and live music, 4-8 p.m., Prince George's Room, Stamp Student Union. Call 4-8630 for info.

Crossroads in Film Series: Yeelen (Brightness), 7:30 p.m., 2203 Art/Soc. Call 5-7856 for info.

Piano Recital, Russian pianist Ilya Itin, finalist of the 1990 UM International William Kapell Piano Competition, performs Chopin and Rachmaninoff, 8 p.m., Center of Adult Education Auditorium. Call 5-7528 for info.

University Theatre: Noises Off, 8 p.m., Tawes Theatre. See Apr. 23 for details.*

Maryland University Club Theater Night: Les Miserables, Mechanics Theater, Baltimore. \$48.50 includes bus service from Rossborough Inn. Call 4-8015 for reservations and info.*

Entomology Colloquium: "The Role of Plant Pathogens on the Biology and Ecology of Vector and Non-Vector Insect Herbivores," Fernando Vega, Entomology, 4 p.m., 0200 Symons. Call 5-3912 for info.

Computer Science at College Park Colloquium: "The Temporal Logic of



The Concert Society at Maryland presents traditional music of Andean Indians when Inkay performs "500 Years of Cultural Survival" at 8 p.m. on April 25 at the University of Maryland Conference Center (free pre-concert seminar, 6:30 p.m.); admission is \$15 standard, \$13.50 faculty and staff, \$12.50 seniors and \$5 students. Call 403-4240 for info and reservations.*

25 SATURDAY

"War, Reconstruction, and Creativity in East Asia, 1920-1960" Conference, April 25-26, panels on Korea, Japan, and China. Call 5-4239 for info.

Concert Society at Maryland, Inkay, music of the Quechua and Aymara Indians of the Andes, 8 p.m.; free pre-concert seminar, 6:30 p.m., University of Maryland Conference Center, \$15 standard admission, \$13.50 faculty and staff, \$12.50 seniors and \$5 students. Call 403-4240 for info and reservations.*

University Theatre: Noises Off, 8 p.m., Tawes Theatre. See Apr. 23 for details.*

26 SUNDAY

Spring Koto Recital, Washington Toho Koto Society, 2 p.m., Tawes Recital Hall. Call Kyoko Okamoto at (301)434-4487 for info.*

Concert Society at Maryland, Boston Chamber Music Society performs Mumford, Mozart, and Schumann, 3 p.m.; free pre-concert seminar, 1:30 p.m., Center of Adult Education, \$17 standard admission, \$15.30 faculty and staff, \$14.50 seniors and \$5 students. Call 403-4240 for info and reservations.*

University Theatre: Noises Off, 2 p.m., Tawes Theatre. See Apr. 23 for details.*

27 MONDAY

President's Commission on Women's Affairs Meeting, noon-1:30 p.m., 1102 F.S. Key. Call 5-5806 for info.

Campus Senate PCC Committee Special Meeting, 3:30-6:30 p.m., 0126 Reckord Armory. Call 5-5805 for info.

Actions, Leslie Lamport, Digital Equipment Corporation, Systems Research Center, 4 p.m., CLB 0111. Reception, 3:30, 1152 AVW. Call 5-2661 for info.

Horticulture Colloquium: "Molecular Cloning and Sequencing of ACC Synthase in Soybean," Derong Liu, Horticulture, 4 p.m., 0128B Holzapfel. Call 5-4336 for info.

Space Science Seminar: "Gas Composition at Various Sites in the Solar Atmosphere," Jean-Paul Meyer, Centre d'Etudes Nucléaires de Saclay, France, 4:30 p.m., 1113 Computer/Space Science. Call 5-6226 for info.

Environmental Career Forum, presented by the National Association of Environmental Professionals, UMCP chapter, 6:30 p.m., 1208 Zoo/Psych. Call 5-6890 for info.

Guarnieri String Quartet Open Rehearsal, 7 p.m., Tawes Recital Hall. Call 5-5548 for info.

Women's Studies Lecture: "Walking in a White World: The Work of Adrian Piper," Josephine Withers, Art History, 8 p.m., 2203 Art/Soc. Call 5-6877 for info.

28 TUESDAY

Ecology Seminar: "Experimental Studies of Gene Interaction and Bacterial Evolution," Richard Lenski, Michigan State University, noon, 1208 Zoo/Psych. Call 5-6945 for info.

20th Century Ensemble Concert, 8 p.m., Tawes Recital Hall. Call 5-5548 for info.

*Admission charged for this event. All others are free.